



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,546	06/10/2005	Lawrence Sterling Young	66221-0048	5446

10291 7590 09/28/2007
RADER, FISHMAN & GRAUER PLLC
39533 WOODWARD AVENUE
SUITE 140
BLOOMFIELD HILLS, MI 48304-0610

EXAMINER

JOYCE, CATHERINE

ART UNIT	PAPER NUMBER
----------	--------------

1642

MAIL DATE	DELIVERY MODE
-----------	---------------

09/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,546

Applicant(s)

YOUNG ET AL.

Examiner

Catherine M. Joyce

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 29-66 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 29-66 are pending.

Election/Restrictions

2. Restriction is required under 35 U.S.C. 121 and 372.

A national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept. Unity of invention is fulfilled only when there is a technical relationship among the inventions involving one or more of the same or corresponding special technical features which define a contribution over the prior art. In the instant case, the claims as a whole do not define a contribution over the prior art. Satijn and Otte (1999, Mol. Cell Biol. 19:57-68) teaches a polynucleotide vector encoding the polycomb protein and transfected cells expressing the isolated Ring-1 polynucleotide.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1. Claims 29, 31-34, 36-39, 41-43, 45-47, 49-50-52, 54-61, and 63-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is Enx/EZH2.**

Group 2. Claims 29-30, 32-33, 34-35, 37-40, 42-44, 46-48, 50-62, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is BMI-1.**

Group 3. Claims 29, 32-34, 37-39, 42-43, 46-47, 50-52, 54-61, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is EED.**

Group 4. Claims 29, 32-34, 37-39, 42-43, 46-47, 50-52, 54-61, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is Ring-1.**

Group 5. Claims 29, 32-34, 37-39, 42-43, 46-47, 50-52, 54-61, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide

Art Unit: 1642

encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is HPH1.**

Group 6. Claims 29, 32-34, 37-39, 42-43, 46-47, 50-52, 54-61, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is HPH2.**

Group 7. Claims 29, 32-34, 37-39, 42-43, 46-47, 50-52, 54-61, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is HPC3.**

Group 8. Claims 29, 32-34, 37-39, 42-43, 46-47, 50-52, 54-61, and 64-66, as drawn to a polycomb protein, a polynucleotide encoding the polynucleotide protein, a host cell transfected or transduced with one or more of a polycomb protein, or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, or a method of treating cancer by administering to a patient a polycomb protein or an immunogenic peptide or epitope derived therefrom, or an isolated polynucleotide encoding said protein, peptide or epitope, **wherein the polycomb protein is CtBP.**

Art Unit: 1642

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine M. Joyce whose telephone number is 571-272-3321. The examiner can normally be reached on Monday thru Friday, 10:15 - 6:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley, can be reached on 571-272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8700.

Art Unit: 1642

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Karen A. Canella/

Ph.D., Primary Examiner, Art Unit 1643

Catherine M. Joyce
Examiner
Art Unit 1642